

LELAND STANFORD JUNIOR UNIVERSITY PUBLICATIONS

1912

TRUSTEES' SERIES

NO. 22

DEDICATION  
OF THE  
LANE MEDICAL LIBRARY  
LELAND STANFORD JR. UNIVERSITY

SAN FRANCISCO, NOVEMBER 3, 1912

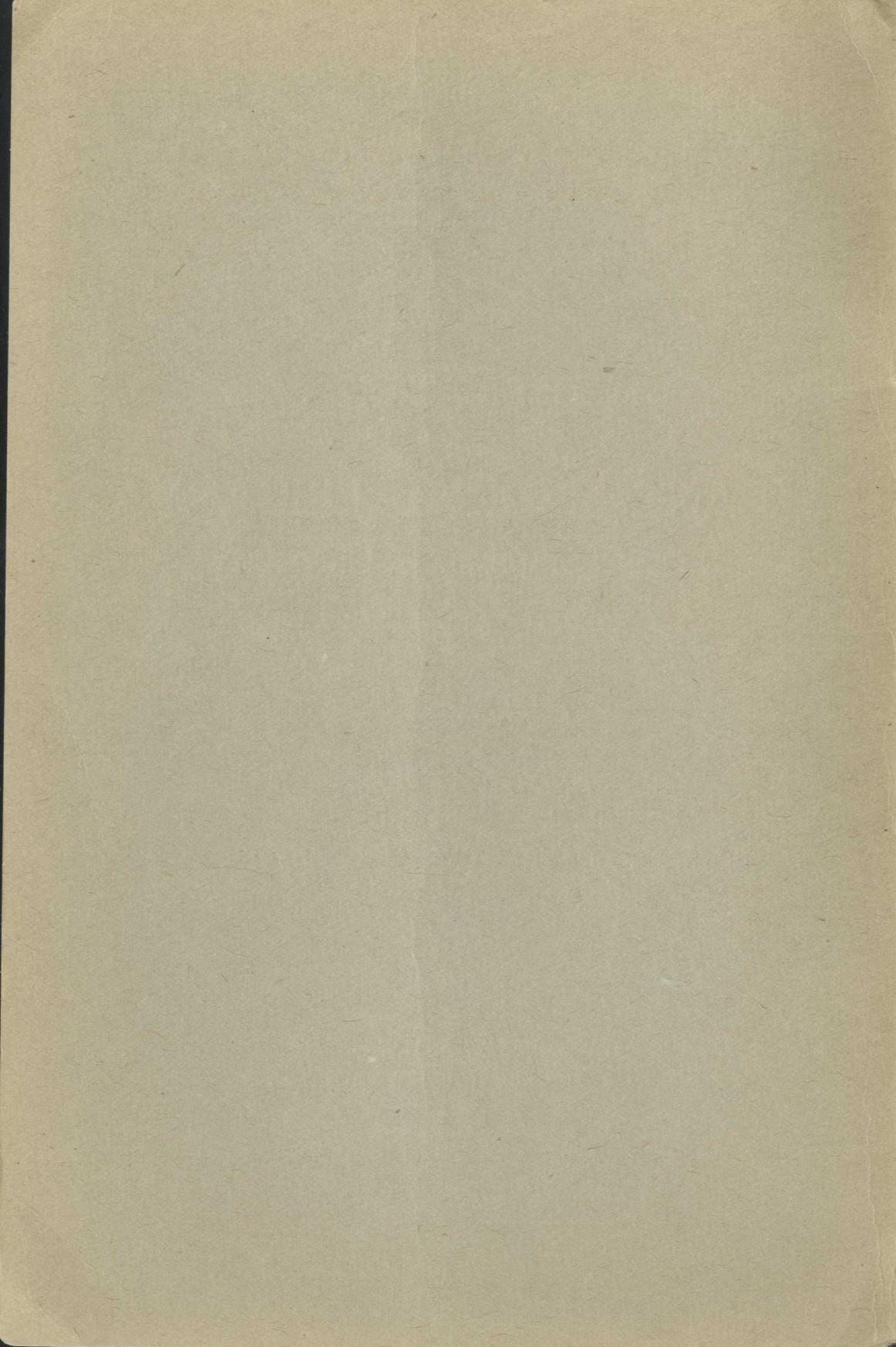
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ADDRESSES  
OF  
TIMOTHY HOPKINS  
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STANFORD UNIVERSITY, CALIFORNIA

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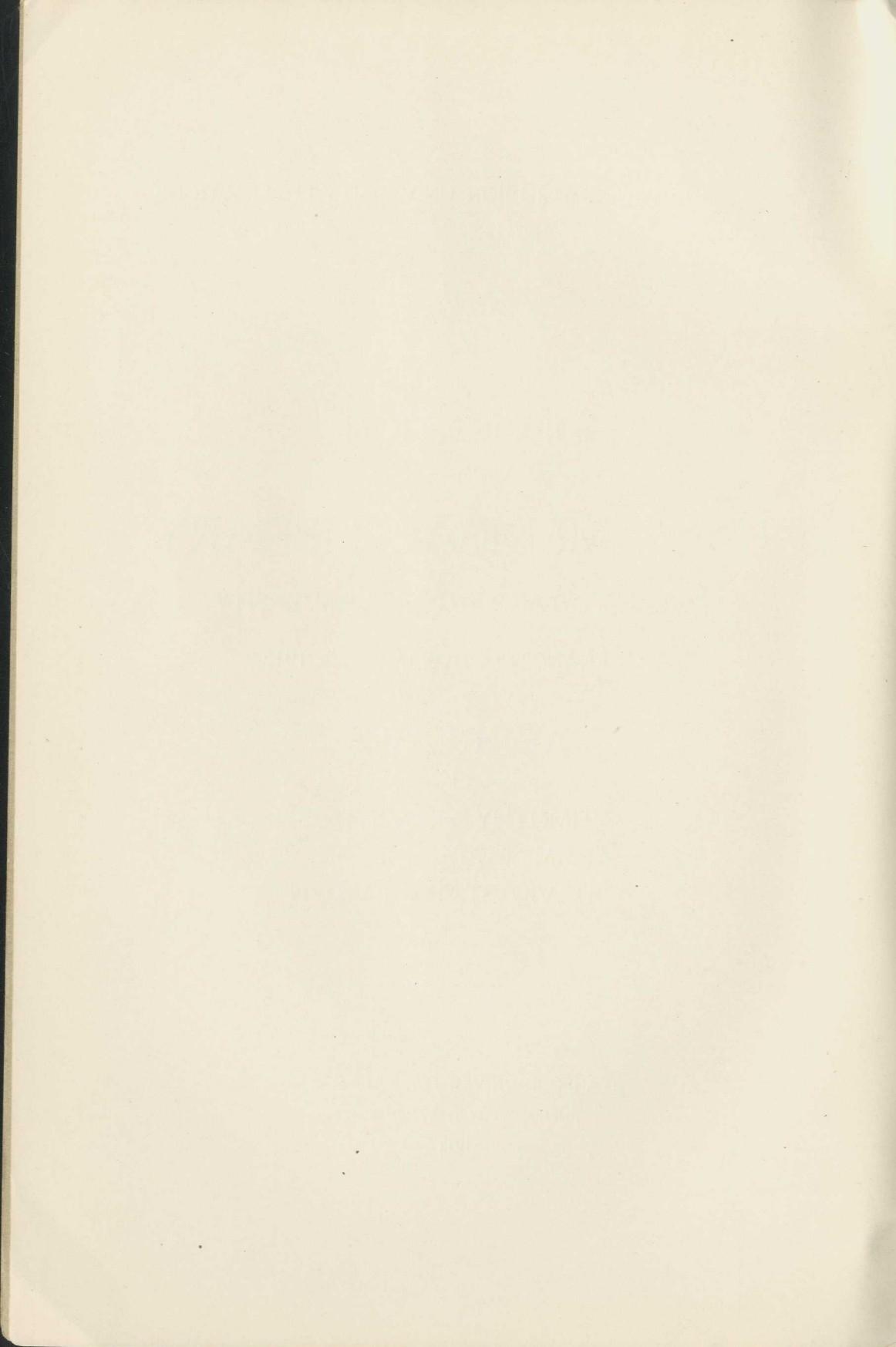
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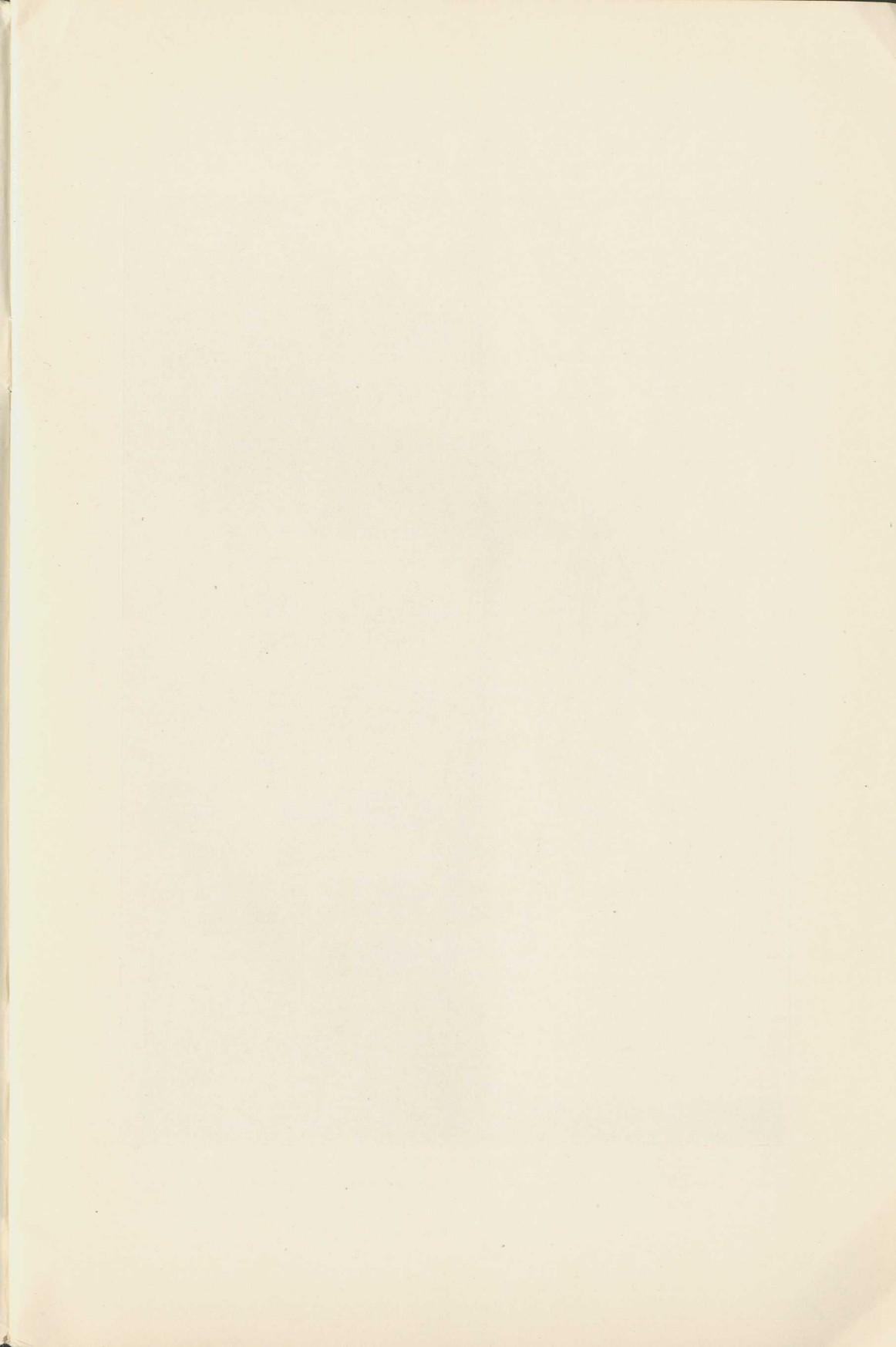
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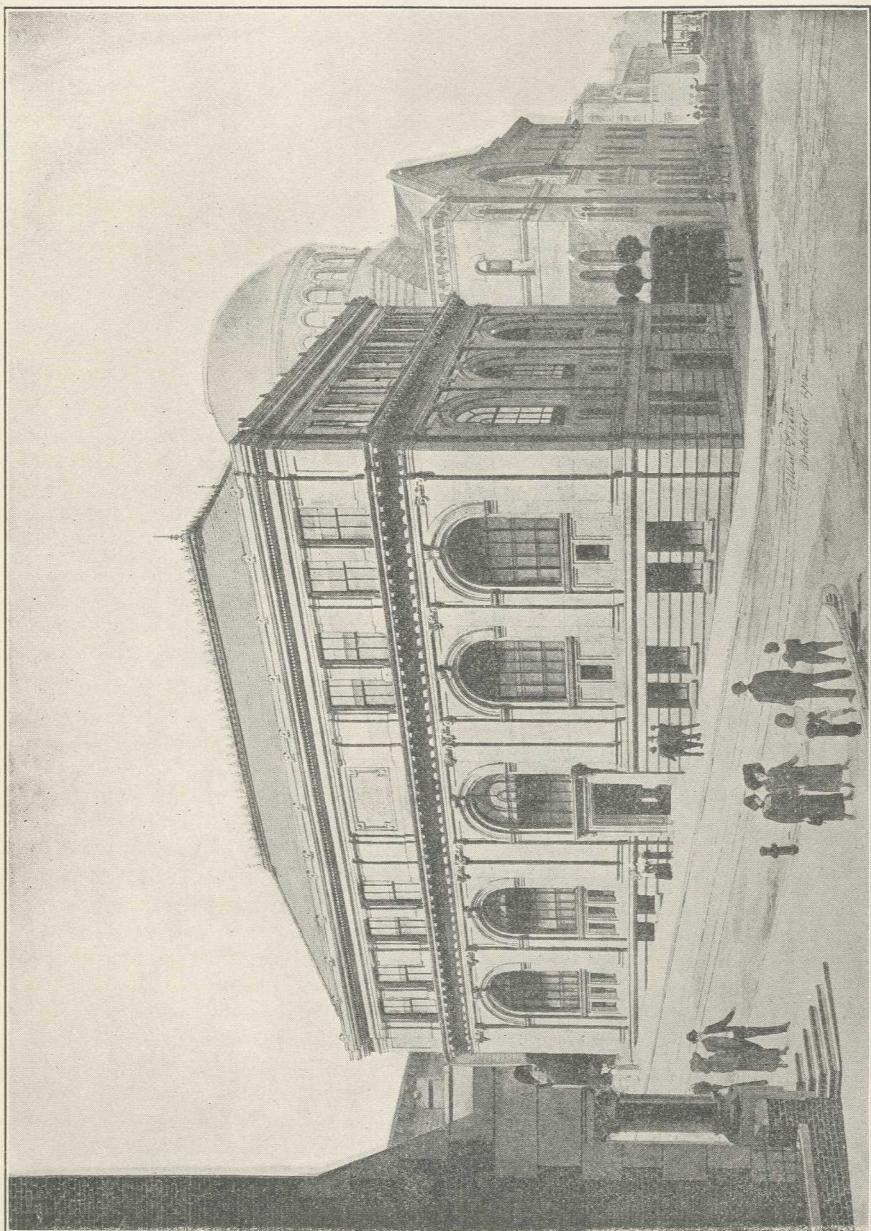
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LANE MEDICAL LIBRARY BUILDING

## **DEDICATION OF THE LANE MEDICAL LIBRARY OF LELAND STANFORD JR. UNIVERSITY**

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On November 3, 1912, the building intended to house the Lane Medical Library of Leland Stanford Jr. University, in connection with the Medical Department of the University, was formally dedicated at San Francisco.

Addresses were given on that occasion by Mr. Timothy Hopkins, President of the Board of Trustees, by Dr. Emmet Rixford, Professor of Surgery, and by David Starr Jordan, President of the University. These addresses are included in this publication.

### **INTRODUCTION**

President Hopkins presided and opened the meeting with the following words :

We meet to dedicate this handsome library building to the cause of education and to humanity, and in behalf of the Board of Trustees of Stanford University, I welcome you. The Reverend Bradford Leavitt will open the exercises with prayer.

After the prayer, President Hopkins introduced Dr. Rixford as follows :

It is no severe strain upon the imagination to believe that, as time rolls on, the three great metropolitan cities of the United States will be Chicago, in its center, and New York and San Francisco upon its two seabards. A city becomes a metropolis, in the broad acceptance of the term, at that stage in its development when, its commercial and financial resources being firmly established, it can turn attention to the Arts and Sciences and adorn itself with libraries, museums, art galleries, opera houses, and other evidences of the cultured side of life.

Today, in opening this Medical library to the public, our city by the Golden Gate has met one more requirement for entrance into the metropolitan sisterhood, she is one step nearer the brilliant destiny awaiting her.

The cities of the United States in which special buildings are devoted to medical libraries are few in number, and this building, in addition to marking an epoch in our metropolitan progress, has the distinction of being the first structure of a strictly non-utilitarian character (other than churches) to be completed in the rebuilding of our municipality. The collection of books it contains may also well be a subject of civic pride,

since it ranks among the greatest in size and importance of the medical libraries in America.

The Levi Cooper Lane Library of Medicine and Surgery was founded, and this building erected, with funds provided by Dr. Levi Cooper Lane and Pauline C. Lane, his wife.

Dr. Lane devoted for many years both his time and his fortune to medical education, and this manifestation of the foresight and generosity of himself and Mrs. Lane is an appropriate and fitting climax to his life's work.

The formation and care of the library was intrusted to the Directors of the Cooper Medical College, who transferred it to Stanford at the same time that they deeded to that University the property and equipment of the college. Results show that their work was well done.

Dr. Emmet Rixford, a pupil of and an associate with Dr. Lane in Cooper Medical College—and, we are glad to add, now of Stanford—has always taken a deep interest in the library, and has loyally devoted such time as could be spared from the practice of the busiest of professions, to its care and development. This intimate connection with the library enables him to speak authoritatively, and he has kindly consented to give us its history.

#### A BRIEF ACCOUNT OF THE HISTORY OF THE LANE MEDICAL LIBRARY AND OF COOPER MEDICAL COLLEGE

Dr. Rixford said:

We are assembled here this afternoon to participate in the formal opening of the Lane Medical Library and in the dedication of this beautiful building, an event which is of the greatest importance in the development of medical education and the progress of medical science on the Pacific Coast. But this meeting marks another event of perhaps even greater significance in the history of medical education in Western America—the transformation of Cooper Medical College into the Medical Department of Leland Stanford Junior University. It is a matter of gratification to me that I should have been requested by the Trustees of the University to speak on this occasion of the history of the Lane Medical Library and Cooper Medical College. It gives me an opportunity to tell of the growth of my most beloved hobby and to say, as it were, a last word for Cooper College, which for the past forty years has stood at the front in the advancement of medical education in California and has been alma mater to so large a proportion of the practitioners of the Pacific Coast.

First of the library: Previously to 1895 there had been made several sporadic attempts to gather together a collection of medical books in Cooper College for the use of its students. Members of the Faculty contributed from their private libraries and the College bought a few books, notably a set of the Sydenham Society's publications at the suggestion of

Dr. S. O. L. Potter, then Professor of the Principles and Practice of Medicine. Dr. W. D. Johnston and Dr. Charles H. Steele, who successively served as librarian, made various attempts to arouse interest in the library. In my student days the shelves contained a much-worn copy of Gray's "Anatomy," Dalton's "Physiology," Pepper's and Reynold's "Systems of Medicine," and some other text books, a set of Wood's "Medical Monographs" and a copy of the British Encyclopaedia. With no regularly attending librarian, the books were scattered about, were never in their places and developed an extreme volatility so that Dr. Steele, when Librarian, in desperation locked up the books securely in glass cases so that at least they could be seen.

It had been the custom for each graduating class on leaving the college to signalize its sense of obligation to its alma mater by making a parting gift to the head janitor. One class, I remember, gave him a gold watch and another a diamond ring. When the time approached for my class to graduate—1891—some of us conceived the revolutionary idea that it would be more fitting for our class, of which we felt singularly and justly proud, to inaugurate the custom of presenting to the library a set of books—perhaps some work of reference. The plan naturally met with much resistance on the part of the men who had received favors from the presiding janitor. After much debate we finally arrived at a compromise—we doubled the amount of the usual subscription that we might carry out both these worthy objects. I was appointed treasurer of the fund and had little difficulty in making the collection, except from a very small minority. One of this group, a big raw-boned fellow, loudly proclaimed that he had paid his tuition fees and owed the college nothing. However, it should be recorded every member of the class paid his subscription and the money was sufficient to purchase a well known "Atlas of Skin Diseases" for the library and a handsome ring for the janitor. Of course the names of the members of the class were inscribed in the Atlas on a fly leaf.

In 1898 a signal departure in the method of instruction was inaugurated in Cooper Medical College by the creation of a salaried Professorship of Pathology and the election of Dr. William Ophüls to the position. Of course a paid pathologist must have books so the library's two friends, Dr. Barkan and Dr. Hirschfelder, gave each \$100 for books on pathology and physiology. From now on the library was a vigorously growing youngster with an insatiable appetite. A system of exchange was inaugurated, the State Library at Sacramento was invaded and some of its duplicates bought, older practitioners were importuned to contribute their accumulations of pamphlets, journals, etc., others to contribute their current periodicals. A number of Eastern medical libraries gave very material assistance in the contribution of an occasional box of books—notably the Library of the New York Academy of Medicine and the Boston Medical Library. The Library of the Surgeon General's office, perhaps the greatest collection of medical literature in

the world, receiving as it does a vast quantity of duplicate material, permits librarians of struggling libraries to take what they need from this duplicate material. On each of several visits to Washington I spent a day or so rummaging in the duplicate room and digging out a lot of books, reports, transactions and odd periodicals which were of use to the College library.

One of our ambitions was to gather together the fast disappearing material out of which some day might be written a comprehensive history of the medical profession of the Pacific Coast. We set about to secure a copy of everything which had been printed on medical matters in California. Aside from a few medical journals, most of this material is in the form of pamphlets. The pioneer physicians of the Golden State were famous pamphleteers. Such things could only be found in second-hand book shops and in dusty and forgotten closets consorting with old shoes, carpet bags, and boot-jacks. As the older practitioners dropped off one by one, these invaluable accumulations of pamphlets were ruthlessly destroyed, while the comparatively worthless text-books, out of date before they were printed, were religiously preserved. We carried on a deal of correspondence in an effort to forestall this slaughter, asking for everything, no matter how worthless, for even old college announcements were of value to us. We had the satisfaction of securing all of the periodicals of California and a mass of ephemera which will be invaluable for the object stated.

During all this time Dr. L. C. Lane, President of the College, apparently paid little attention to the College library beyond contributing occasionally a few books, among them a set of the Index Catalogue of the Library of the Surgeon General's Office; but one evening in 1898 he sent for me to come to his house. My astonishment knew no bounds when he announced that he and Mrs. Lane had just made their wills and wanted me to be one of the witnesses thereto. Dr. Lane then gave me a resume of the provisions of their wills, saying that it was their desire that the residue of their property should be devoted to the purposes of a Medical Library.

Dr. Lane died February 9, 1902, leaving his entire estate to his wife. She died within the year leaving one-third of the entire estate to Cooper Medical College for the purposes of a Medical Library and a "special library building therefor," one-third being all of an estate which, under the law of the State of California, can be conveyed by will to a corporation or for charitable purposes. The remaining two-thirds were left to the then President of the College.

The one-third of the estate which the college received for the library consisted of some \$40,000 in money and a one-third interest in a large amount of unproductive real estate of the value approximately of \$150,000, more than would be needed for a simple college library but utterly inadequate to erect a monumental building for a general medical library such as Mrs. Lane had planned, and at the same time provide sufficient

endowment for its maintenance. The sale of several pieces of the real estate enabled the Directors of Cooper College to purchase as a site for the Library the lot on which this building stands, while the interest on the \$35,000 which remained in the bank furnished a small fund for the purchase of books.

After Mrs. Lane's death the library was enriched by the private library of Dr. Lane, consisting of some 2,000 volumes, containing many medical classics and some valuable historical material, and raising the number of volumes in the library to 10,000, exclusive of duplicates.

In furtherance of their trust under the will of Mrs. Lane, the Directors of Cooper College by resolution of August 13, 1906, founded the Lane Medical College, contributing the college library as its nucleus, and set about making plans for the Library building. When it came to the question of endowment the Directors were informed that the two-thirds of the estate bequeathed by Mrs. Lane to the president of the corporation were considered by the latter a personal gift and would not be available either for the Library or the Lane Medical Lectures. This of course put an effectual stop to construction of the Library at that time.

In 1906, through the goodness of Dr. Abraham Jacobi of New York, we were enabled to purchase at a most advantageous price the great collection of duplicates of the New York Academy of Medicine—the bulk of which was the former Library of the New York Hospital—which added some 28,000 volumes to our stacks, exclusive of duplicates, and made the Lane Medical Library the largest west of Chicago and the seventh in size in the United States.

When Cooper Medical College conveyed its properties to Stanford University it transferred to the Trustees of the University its Lane Medical Library Trust. How well the University authorities have fulfilled the trust, advancing funds to the library against the landed endowment as security so as to make the library immediately available, this beautiful building testifies.

The conservative Trustees, however, were willing to advance in this manner only \$80,000 and contemplated erecting a Library building on the L or key lot adjoining, but the Directors of Cooper College felt that a building in a narrow lot in the middle of the block would not have the monumental character desired for the Lane Medical Library, so they appropriated from the reserve funds of the college \$20,000 which enabled the Trustees to erect this splendid building on its present site. Of course the building and its equipment cost a good deal more in the end, but the Trustees have the consciousness of a good piece of work well done.

Dr. A. Barkan had created a fund in Cooper College of \$5,000, known as the Teachers' Fund, the income of which was expended in traveling expenses of some member of the teaching staff to assist him in visiting other medical institutions. When the properties were turned over to Stanford University, there being no longer any use for the Teachers' Fund of Cooper College, the Directors, with Dr. Barkan's consent,

transferred this sum to Stanford University as an endowment of a section on ophthalmology in the Lane Medical Library—to be named for Dr. Barkan. Dr. Barkan added another \$5,000, which made an endowment of the Barkan Library of Ophthalmology and Otology of a round \$10,000.

Now that Dr. Henry Gibbons, Jr., the students' friend and for forty years the Dean of the College, has passed away his old associates in the faculty and his former students have undertaken to raise a similar fund for a section of the Library on obstetrics as a memorial to Dr. Gibbons, by which in a sense his life's work as a teacher may be continued.

The history of Cooper Medical College is bound up in the lives and achievements of two remarkable men—Levi Cooper Lane and his uncle, Elias Samuel Cooper, for whom the college was named.

Dr. Cooper began the study of medicine at the age of sixteen, receiving his degree from the St. Louis University in 1843. He entered practice in Danville, then moved to Peoria, Illinois, where for several years he maintained a dissecting room in connection with his office. He knew and greatly admired Dr. G. L. Brainerd, founder of Rush Medical College, Chicago, and became fired with the desire to emulate him and found a medical college on the Pacific Coast. After a tour in Europe, he started for Portland, Oregon. A companion on the steamer was Captain James M. McDonald and the friendship which ripened on this voyage was the reason for Captain McDonald's gift to Cooper College, forty years afterwards, of the two fifty varas of land on which Lane Hospital was erected, besides \$25,000 in money for college purposes.

Dr. Cooper by some persuasion stopped in San Francisco and met with signal success in surgical practice. He was a leading spirit in the movement which resulted in the formation of the State Medical Society in 1856, and in that year began the publishing of the *San Francisco Medical Press*. In 1858 he founded a Medical school in San Francisco, the first on the Pacific Coast, naming it the Medical Department of the University of the Pacific. Dr. Cooper made the very remarkable announcement of a course in operative surgery on animals as affording the students unusual opportunities of perfecting themselves in operative technique. In default of a charter the school got its authority for the granting of degrees in Medicine by an affiliation with the University of the Pacific in San Jose. They had at first no students, but the faculty held regular sessions and lectured to each other. The school met with the most intense criticism and opposition on the part of a large proportion of the medical profession; it was called the "Cooper Shop," was the object of scathing denunciation in the *Pacific Medical Journal* and the *California Medical Gazette*. However, it persevered and graduated a number of men who took prominent place in the medical profession of California.

In the faculty were some very well known men—A. J. Bowie, Isaac Rowell, J. F. Morse, R. Beverly Cole, Henry Gibbons (Sr.) and, after

1860, L. C. Lane, who had resigned from the Navy and, at his uncle's invitation, entered practice in San Francisco.

Sessions were held in the rooms in the top story of Dr. Cooper's office on Mission Street, below Third. It is interesting to note that Dr. Cole, who was dean or secretary of the faculty, felt that the modest quarters, although rent free, were beneath the dignity of an institution which was destined to take prominent place among the educational institutions of the country, and he urged the renting of some more conspicuous building up town; in fact he paid the rent out of his own pocket for a time of a part of Union Hall, which old San Franciscans will remember stood on Howard Street near Fourth, but it was not many months before they moved back into Dr. Cooper's building.

This school graduated twenty-eight students with the degree of M. D. between the years 1859 and 1864, among them several who became well known: Henry Gibbons, Jr., William J. Younger (the dentist), James Murphy, John E. Kunkler, M. A. Cachot, D. S. Deal, W. T. Garwood.

Dr. Cooper died in 1862 at the age of forty, and the school, lacking his strong leadership, soon went to decay and in 1864, when Dr. H. H. Toland founded the Toland Medical College and erected a commodious brick building on Stockton Street near the City and County Hospital, which then was on Francisco Street at North Beach, the Medical Department of the University of the Pacific ceased its activities and its students continued their work in the new school.

It was not long, however, before the students petitioned the faculty to invite Dr. Lane and Dr. Gibbons to become teachers in that school. This was done and Dr. Lane became Professor of Physiology, and Dr. Henry Gibbons (Sr.) became Professor of Materia Medica and Therapeutics, and Dr. J. F. Morse (Sr.) Professor of Clinical Medicine. Dr. Cole was not invited as he was out of favor with Dr. Toland. He was subsequently avenged, however, when as a member of the Board of Supervisors he was instrumental in having the City and County Hospital moved from the neighborhood of Dr. Toland's building to the extreme opposite side of the town—the present site on Potrero avenue—and this very shortly after Dr. Toland with much difficulty had secured access to the hospital wards for his students. In the later sixties there were no street cars running into the Mission, in fact many of the streets were not yet graded. I do not hesitate to tell of this incident because Dr. Cole often spoke of it jokingly in after years.

After six years, therefore, in 1870, because of internal dissension in the school, the detail of which need not be mentioned here, Dr. Lane and Dr. Gibbons resigned from the faculty of Toland College and reorganized the old school with many of its old faculty, including A. J. Bowie, J. F. Morse, J. P. Whitney as Emeritus Professors and R. Beverly Cole. Dr. Henry Gibbons, Jr. was made Dean. All the students but one left Toland and went into the new school, which in order to secure authority to grant

diplomas entered into relations with University (City) College, a Presbyterian school on Stockton Street where the City of Paris Building now stands, and held its sessions in the college building. In recognition of the services of this Presbyterian School, the Medical College, which soon changed its name to that of the Medical College of the Pacific, gave free tuition in medicine to one student each year nominated by the University College and later by the Presbyterian Church, a custom which was continued for many years after the Presbyterian college went out of existence, that is, until about 1895. Though the purpose was to further the cause of the medical missionary, not all who received free tuition in this manner became missionaries; some entered private practice.

In a short time Dr. Toland besought Dr. Lane and Dr. Gibbons to let by-gones be by-gones and to come back into the Toland School but it was characteristic of both these strong men not to retrace a step once taken—besides they had the students. Dr. Toland then sought through Dr. Cole to induce the students to return. Dr. Cole went, but no students followed. Soon Dr. Toland made overtures to the Regents of the University of California which resulted in the affiliation of the Toland Medical College with the University in 1873.

The privilege of giving clinical instruction in the wards of the City and County Hospital was obtained (in 1870) and an out-patient or ambulatory clinic was opened in the college building. Dr. John F. Morse (Sr.) was chiefly instrumental in the establishment of this clinic and gave it a great deal of attention, in consideration of which after his death in 1877 the faculty named it the Morse Dispensary, which name it bore for fifteen years—even after the college became Cooper College.

In 1882 the members of the faculty were invited by Dr. Lane to form with him a new college to be known as Cooper Medical College in honor of Dr. Lane's uncle, Dr. Cooper. Dr. Lane had constructed with his own funds and without consultation with or knowledge of the faculty the great brick building now standing on the northeast corner of Sacramento and Webster streets. Many people have thought that this building was constructed with money which Dr. Lane had received from his uncle's estate. But the fact is that Dr. Lane received nothing from his uncle's estate except some bills which were presented after the estate was closed and which Dr. Lane paid. The only money that Dr. Lane received from his family was the sum of \$80.00 from his mother's estate. When he had completed Cooper Medical College, he used these \$80.00 for a pedestal to support the heart and brain of Dr. Cooper, which had been preserved in an inner sanctum in the College museum.

Needless to say the invitation to form a new college was accepted and Cooper Medical College was organized and incorporated under the laws of California as a "corporation to do business without profit." At this time, which was soon after the adoption by the State of California of the so-called "New Constitution," there was no provision of law for the incorporation of educational institutions as such.

Dr. Henry Gibbons, Jr., whom in those days they called Harry Gibbons, was elected Dean of the Faculty and Treasurer of the Corporation —two positions which he held until his death.

In 1882 Dr. Lane founded a course of popular lectures to be given in the college auditorium each winter whose object was the dissemination among the people of medical knowledge. To insure the perpetuation of the course, which was designated the Lane Popular Lectures, he made the giving of the lectures the condition on which he deeded the property to the College.

The lectures were bitterly assailed as subversive of the dignity of the medical profession. Their effect in removing the veil of mystery behind which medicine masqueraded was looked upon with extreme disfavor, but the wisdom of the founder of the lectures is now seen clearly enough, for the medical profession at last acknowledges that only through the dissemination of medical knowledge can the public be taught to appreciate the fact that medicine is no longer a matter of doctrine or school, of dogma or faith, but is based on scientific observation of natural biologic phenomena. Since then similar courses of lectures have been inaugurated in other institutions, notably Harvard University Medical School.

These lectures have been given annually to the present time and the authorities of Stanford University propose to continue them though because of confusion in title with the Lane Medical Lectures, which have a separate financial foundation, they have thought best to change the title of the course.

About this time a determined effort (the second or third) to bring the two schools together was made by dear old Doctor John LeConte, when President of the University of California. In the goodness of his heart he went so far as to have an appointment to a professorship in the Medical Department of the University issued to each of the members of the faculty of Cooper College. The effort was well meant but not well timed, for Dr. Lane had just spent \$150,000 of his money in constructing the College building, and it was not in him to give up then. When a committee of the Medical Faculty of the University waited on Dr. Lane he stated that he was opposed to the proposed union, that in his opinion there was room for the two schools, that the friendly rivalry which existed between them was beneficial to both; they could keep up the standard of medical education, but if they united other and inferior schools would surely rise up to take the place of one of them. When the matter was brought up in his faculty Dr. Lane summarily closed the incident by saying that if anyone wished to accept the appointment he had best do so at once.

In 1889 Dr. Lane erected the easterly portion of the College building containing laboratory rooms and a large auditorium known as Lane Hall.

In 1893 and 1894 Dr. Lane erected a hospital which he proposed to

call in honor of his wife The Pauline Lane Hospital but Mrs. Lane thought the simpler designation, Lane Hospital, better and it was therefore adopted.

The Hospital was formally opened January 1, 1895, by a surgical operation performed by Dr. Lane in the hospital amphitheatre followed by addresses by Dr. Lane and Dr. Edward R. Taylor. Lane Hospital was intended as a teaching hospital to furnish clinical cases for the instruction of the students of Cooper College and was deeded by Dr. Lane to the College corporation, together with the land on which it stands. Dr. Lane's desires and intentions may best be expressed by quoting the words inscribed by him in a marble tablet in the vestibule of the hospital:

"This hospital, erected in the year 1893 by Levi Cooper Lane, physician and surgeon, with money earned by himself in his profession, is given by him to suffering humanity and to the healing art, in the hope that the former may here find refuge and relief; the latter, exercise of its humane skill and intelligent sympathy."

As was the case in almost everything Dr. Lane did, there were those who opposed the erecting of the hospital. Property holders in the neighborhood were fairly up in arms—one wrote Dr. Lane an anonymous letter threatening to destroy him and his hospital by dynamite.

In 1895, soon after the opening of the Lane Hospital, Dr. Lane announced to the Board of Directors that he had finally brought to fruition a plan which he had long cherished of founding a course of Medical Lectures to be given annually in the college by eminent men in medicine and the allied sciences, and that Professor William MacEwen of Glasgow had accepted the invitation to inaugurate the course by a series of lectures in the summer of 1896 on the "Surgery of the Brain." The honorarium of the lecturer was to be \$2,000 and ten lectures were to be given each year, these to remain the property of the lecturer. In all, thirteen courses have been given by men pre-eminent in their profession.

In inaugurating this course of lectures, Dr. Lane erected a marble slab in Lane Hall describing the lectures and closing with the words "founded and endowed by Levi Cooper Lane." Unfortunately, in the matter of endowment, Dr. Lane's fortune was for the most part invested in unproductive real estate; the money he had in bank he dared not deplete, for his health began rapidly to fail and his earning power in his profession to dwindle, and he and Mrs. Lane needed the income of this fund to live upon. He therefore postponed setting aside a definite sum for the endowment of the lectures but paid the honorarium annually out of his pocket. But after his death and that of Mrs. Lane, the College had no funds which might be used for this honorarium. It was paid one year by Mrs. Lane and the three following years by the President of the College, who had received two-thirds of Mrs. Lane's estate. On his refusing to continue this payment or to make effectual the endowment of the lectures, the course ceased. When, however, Cooper College was conveyed to Stanford University, the Trustees granted the Directors of the

College the privilege of determining to what purposes the reserve funds of the College should be put. Until the union with Stanford University had been effected these reserve funds had been jealously guarded as furnishing an income to offset the annual deficit incurred in the running of the College, but under the University support the funds were not needed for this purpose. The Directors of Cooper College therefore made a number of much needed improvements in Lane Hospital and set aside \$25,000 for the endowment of the Lane Medical Lectures, which would give an income sufficient to furnish the honorarium for a course of lectures each second year. The Trustees accepted the fund for this purpose and have arranged for a course of lectures for 1913.

The development of the curriculum of Cooper College is typical of the development of the curriculum in most of the better schools of medicine in this country. In the old Medical College of the Pacific the course of lectures was given during six months, from June to November—lectures for the most part repeated each year, and the student sat dutifully on the benches and gravely listened to the same lectures he had heard the year before. The lectures were supplemented, however, by quizzes, often given in the evening, and the course in practical anatomy was comparatively thorough and the students saw much practical work in the offices of Dr. Cooper and Dr. Lane. In 1879 the course was lengthened to three years and in 1896 to four—on a high school graduation or equivalent examination as a requirement.

For a number of years beginning in 1878 an optional course of three months' duration was given in the spring of eight to ten lectures a week on special subjects and in 1888 this course was made compulsory for the last year of the curriculum. Most of the students took this optional course or short term and made good use of the dissecting room.

As said above, the greatest single step forward looking towards modern methods of teaching occurred in 1898 with the election of a paid Professor of Pathology, and I may add that the chief credit for this departure rested with Drs. Barkan and Hirschfelder. Another event of scarcely less importance was the putting of the teaching of Physiology on an academic basis, for which Cooper College was grateful to Professor O. P. Jenkins of Stanford University who, in 1896 and for several years thereafter, came from Palo Alto twice a week, giving a lecture and recitation course and receiving no compensation beyond his traveling expenses. On his own initiative he established a laboratory of Physiology in Cooper College in which he had the assistance of R. L. Wilbur, a former pupil (now Executive Head of the Medical Department of Stanford University) who at the time was a student in Cooper College. The faculty gave \$500 for equipment. The laboratory course was at first optional but as practically all the students took it the course was soon made compulsory. In 1900 Dr. W. E. Garrey was elected Professor of Physiology and gave his entire time to his teaching.

While these events marked a new era in the method and

quality of the teaching, there was a reverse side to the picture. Previously to this time the expense of conducting the College was small, and a considerable accumulation of profits resulted from the students' tuition fees—but to the credit of the teaching staff be it said that not one dividend of profit was ever distributed to the faculty. In fact, with the exception of the nominal fees permitted the demonstrators of anatomy, the lecturers and teachers gave their services without monetary compensation. The nearest approach to a dividend occurred when one of the faculty who had labored for years for the institution and who had a very small income because of large demands on his time being made by the fact that besides being a physician he was a clergyman, was stricken with a prolonged illness which proved his last the faculty voted him a gift of \$500. The accumulation to the amount of \$35,-000 went to equip Lane Hospital, as said above; and other payments had to be made to the Hospital for several years, its income from patients being less than its expenses. All the remaining accumulation, and later all the profits of the Lane Hospital, were expended in making improvements in the plant and for the hospital maintenance of an occasional needy patient. Without endowment, Lane Hospital made no pretense to being a charitable institution and yet did a great deal of charitable work.

Under the new order of things salaries had to be paid to the Physiologist, the Anatomist, the Chemist, in fact, to all who occupied the so-called non-practical chairs and each had to have one or more paid assistants. Then each of these departments had its laboratory and the laboratory expenses had to be met. The students' fees could not be increased beyond \$150 (they had previously been \$100) per year—the increased requirements lessened the number of students so that for the first time in 1900 the expenses of the college were greater than its income from students. This annual deficit was afterwards met, as said above, by interest on the modest amount of invested funds.

Dr. Lane, with his faculty having built up the school, given the college its buildings and Lane Hospital and the four fifty varas of land, free of debt, could not see why the younger men to whom he was about to turn over the institution could not go on and develop it. As a stimulus to the younger men, Dr. Lane had inserted into the deeds clauses which forfeited the property to the State in case the future authorities of the College should at any time unite Cooper College with any other institution. But Dr. Lane finally realized that times had changed, that the cost of medical education had enormously increased, that loyalty and devotion were no longer sufficient, that from henceforth great monetary endowment was necessary to the very life of the school, that the student could no longer be expected to pay more than a fraction of the cost of his training. With this realization Dr. Lane almost on his deathbed had all the College real property conveyed to him by deed and the deed recorded, whereupon he redeeded it to the corporation without condition. To those who knew Dr. Lane and his character this realization and this

act in his old age betokened the greatness that was in him. The Directors of Cooper College, believing that it is right for the Medical school to be a part of a greater educational institution, as is the case in all European universities, realizing that sooner or later Stanford as well as the University of California would have a Medical department, and being unwilling to have Cooper College forced by university competition into the position of a minimum requirement school when it had always during the forty years of its existence maintained its position as a maximum requirement school, cheerfully, though with many heartaches for the institution they loved, conveyed all the physical properties to the Trustees of Stanford University, on the sole condition that the property be used for purposes of Medical education in the sense of teaching young men and young women to be practitioners of medicine and that the name of Dr. Lane be suitably commemorated—for these properties represented for the most part the earnings of Dr. Lane in his profession.

The Trustees interpreted this commemoration of the name of Dr. Lane in a most touching way—they provided in their resolution of acceptance of the property that each diploma of graduation from the Medical Department of Leland Stanford Junior University should bear the words, "Founded as Cooper Medical College, by Dr. Levi Cooper Lane." This, with the Library, is Dr. Lane's monument—more enduring than brick or stone.

### THE DUTY OF STANFORD

President Hopkins in introducing President Jordan said:

The stimulus of scientific methods has vivified the study and intensified the practice of medicine. Science, in broadening the field of knowledge and increasing the certainty of diagnosis and treatment, has by its very impetus carried with it thoroughness of preparation. The professor of Medicine must be an investigator as well as a teacher, and as the education of a man of open mind is never ended, the earnest student retains as a physician the investigating instinct.

The spur of his student days, to study and observe, has only been changed to observe and study in his maturity; for, as Pasteur remarks, "In the fields of observation chance favors only the mind which is prepared." While Pasteur was proclaiming the value of preparation for the work of research, it is just as surely the foundation of the rewards of industry and ambition in the every day practice of medicine.

This is but meeting the requirements of our day, for the imperative call is not—Flexner states—for a greater number of physicians, but for a smaller number of better trained ones.

Here is the province of the university; it must start the student along the right lines, instill into him high ideals, teach him to think and to know, and thus prepare him for the years of ripening experience, for experience only makes experts.

Stanford University has heard the call, and is earnestly striving to meet these demands by raising and maintaining the standards of medical education. Quality is its motto, and in the belief that it is benefiting humanity, it gladly contributes its efforts and its means to the end and in the hope that its graduates may be distinguished by this attribute.

In order to do the best today one should know the best that was done yesterday. A French author, under the spell of the subtle pleasure of reading works of the past, has designated books as "the monuments of vanished minds"; it would not be unfitting to characterize the records of the sciences as milestones along the road to progress, whose guidance we need lest we stray from the path of ultimate achievement.

In none of the sciences is this guidance more needed than in medicine, and as herein lies the function of the library, we value it as a potent influence in medical teaching and study, recognize its absolute necessity in research, and its helpfulness to the practicing physician.

Stanford University has accepted the Lane Library trust with a full appreciation of its significance both to medical education and to the profession. Its importance has justified the University in liberally appropriating means for book purchase and for maintenance. Pending liquidation of library assets it has likewise advanced the funds to construct this building, so that there might be no delays in its benefits.

California enjoys a splendid geographical isolation, which is not without its advantages considering the opportunity it offers of engendering a community of interest—the binding together of the efforts of each for the benefit of all—and an abiding pride in the results of these reciprocal efforts. This isolation, however, leaves a special professional library here peculiarly dependent on its own resources, with no associate or ally near to aid it, and enforces special efforts for its support and development.

Since the needs of the medical student are only a part of the wider field of the usefulness of the library, the Trustees of Lane have put into effect the policy of strengthening the library along the lines of the greatest possible benefit to the practicing physician and the investigator.

They believe that the developing of this type of a great library will have an invigorating and enduring influence upon both research and the profession, and that in pursuing this policy they are but fulfilling the desire of the donors and building upon the foundation so wisely laid by the Directors of Cooper Medical College, our predecessors in the trust.

The University has no false pride in the possession of the largest medical library of any college in the Americas, but is proud in having been instrumental in making the dream of years a reality, and takes deep satisfaction in placing at the service of the medical profession a library constantly increasing in value and in a setting befitting its importance.

In October, 1891, the doors of Stanford were opened to its students, and it is a happy coincidence that the coming of age of the University

should be commemorated by the opening of the doors of this library and by her taking an active part in medical education.

During the past twenty-one years we have been fortunate in having had but one President, and we have likewise been fortunate that David Starr Jordan has been our President during the formative period of our University. Educationally catholic and progressive, no one is better qualified than Dr. Jordan to speak upon the timely topic of "The Relation of the University to Medicine," which is the subject he has chosen to present to us today.

### THE RELATION OF THE UNIVERSITY TO MEDICINE

President Jordan said:

We have met today to mark a milestone in the history of Stanford University on the one hand, and in the history of medical education on the other. It is a milestone that we mark, not an epoch, for epoch making events do not often appear more than once in a life time. But a milestone marks progress, even though after it is set up all shall go on as before.

Stanford University is now twenty-one years old. Its days were opened on a hopeful morning of October in California, where all days are hopeful, just twenty-one years ago. It has come of age. It is old enough to be doing the work of a grown university.

And there is no work of the University more worthy or more needed than medical instruction and medical research, the training of men who shall help their fellows in all their bodily ills, on the basis of the best and fullest knowledge, while themselves adding day by day to the world's stock of wisdom. In these days medical research stands on the firing line of the advance of science. There is no branch of knowledge which is moving more rapidly and there is none which contributes equally to the aggregate of human welfare.

We dedicate today the home of the Lane Medical Library of Stanford University to medical practice and medical research. It is the gift of the will of Mrs. Levi Cooper Lane. It begins its existence with a handsome building, adequate for its needs for years to come. When it must be extended we hope that the grateful people of San Francisco will be here to see that all its needs are met.

It has already on this initial day a library of nearly forty thousand volumes, all relating to medical practice and medical research, a good number of books as you will see when you compare it with other libraries devoted elsewhere to the same subject.

The importance to San Francisco of such a collection of medical books kept up-to-date by a steady inflow of the best journals and monographs is obvious. The library is the natural center for creative effort and hence for all research, since there is no loss of energy so needless as is the doing again that which has been well done before. All new work must be based upon knowledge that has gone before. The breath of life

of all research is the joy of seeking for the unknown. Chance discoveries of great moment in medicine are no longer to be made at random. Piece by piece must new truths be found and correlated. Each investigator must rest his work upon that of others. He must stand on the shoulders of the past if he is to look into the future. To know what has gone before is only possible where accumulated records are at hand. In the Library which we dedicate today is massed the product of thousands of minds, some great and far-seeing, some small but earnest, but all seeking after truth. The great function of such a library as this is to accumulate and classify and make ready of access the knowledge that the world has already gained and to keep abreast with the steady current of advancing medical science, choosing from it all that seems likely to be worth while. Such a function is a difficult and responsible one and one that will be performed in fuller and fuller measure by this library as it meets more and more with the support of the great state in which it is located. Indeed its interest should extend far beyond the confines of any one city or state for no such collection of medical books is to be found elsewhere on this continent west of the Mississippi nor along the shores of our great ocean so soon to be expanded by the Panama Canal, itself a product of human skill that has been made possible by the advance of the science of medicine.

The Stanford Medical Department with its Medical Building, including Lane Hall, its Lane Hospital and its Lane Library, are, as you have already heard from my colleague, Dr. Rixford, the gift of the eminent surgeon, Levi Cooper Lane, and of the Faculty of Cooper Medical College. Dr. Lane first established the Cooper Medical College, named by him for his uncle, Dr. Elias Cooper. But as the future of medical instruction must lie with the universities, and as sound medical instruction must rest on university courses in physiology, chemistry, biology and physics, Dr. Lane made arrangements whereby the Board of Directors of Cooper Medical College were able to deed this property to Stanford University on the sole condition that the University should use the gift of money and buildings for medical instruction. The corporation of the Cooper Medical College has dissolved itself, patriotically turning over its good will and all its properties, hopes and achievements to the larger institution, and Stanford University has loyally accepted the trust and is doing the best work it knows how to do in the line of the acceptance of these pledges.

The function of the privately endowed university, as the authorities of Stanford understand it, is to set standards in education and to uphold these standards. It must set standards in service to society as well as within its own classrooms.

In whatever way a school of medicine can help the people it is its duty to render aid. The hospital is the laboratory of clinical medicine. This has become an axiom in modern medical instruction. But a further duty is incumbent on the university hospital of today. It should be so

conducted and controlled as to serve as a model for all that is essential and worthy in the institutional care of the sick. Only in such a hospital, with its numerous internes and assistants and its trained staff, can satisfactory control be made of new methods of treatment and such treatments standardized for the use of others. The elevation of nursing standards, the thoroughness of case study and care that inevitably follow the well-trained student into the hospital and ward are the great boon of a university hospital. All this involves an effort at the best in research, in training, and in character building.

The funds of a private institution are limited. It can call on no legislature for help if it has undertaken more than it can carry out. It must be sufficient unto itself. This means limitation. It can never cover the whole range of knowledge, nor the whole range of practical achievement. It cannot make its campus co-extensive with the state. It cannot provide for multitudes of students, unless, dependent on fees, it makes these fees so high as to be prohibitive to self-helping men and women. To this class belongs the vast majority of the students we in the West find worth while.

But the private institution has its own advantages. It has freedom of development. It is dependent on no outside influence for its direction. It can undertake what it deems best worth doing. It can insist on the highest standards. It is above all temptation to grant university titles or degrees to the products of four years of frivolity, dissipation and sham. Above all, it has the privilege as well as the duty of making its professional courses of such a character that it can be sure that every graduate is really a university man. It is not claimed that the private university has any monopoly of high standards or of efficient practice. It claims only that no other type of institution has the right to loftier ideals. In proportion as it is true to its opportunity its aims should be the highest within its range of possibilities.

No institution can do better than its best. If it falls short of this, it has no adequate reason for being. And Stanford University means to justify herself. She is pledged to justify herself in the direction of medical instruction. And after all, in the multiplicity of medical schools instruction in medicine is nowhere overdone. The profession of physician is overcrowded because its men are undertrained. It is a very true expression that there is always "room at the top." In medicine as elsewhere in life the crowd is around the bottom of the ladder.

A young medical student in New York, it is said, committed suicide not long ago, leaving behind him this word: "I die because there is room for no more doctors." Room for no more doctors just now when in the history of the world it is most worth while to be a doctor! Now, when the progress of the sciences and arts which deal with sickness and health have given the intelligent and honest doctor a power no one else has ever had before over the forces of sin and death!

Another medical student was asked how he dared return to take so

much time to prepare for a profession already so overcrowded. "I propose to practice medicine," he said, "those in the crowd must look out for themselves."

Frederick Denison Maurice once said: "Make your system of education such that a great man may be formed by it, and there will be manhood in your little men of which you do not dream."

And to such a system of instruction in medicine, a system which may form great men if great men come within its reach, this beautiful Library is dedicated. And all resources of Stanford University stand pledged to make its purpose good.

I said just now that medical research is now on the firing line of the advance of science. It has left behind it as outworn garments all medical theories, and all schools of medicine. The medical advance is the work of no school, the offspring of no preconceived theory.

One of my early students, on graduating in medicine, was asked to what school he belonged. His answer was, "I have nothing to do with schools. I am trying to practice medicine." Just as soon as men seriously try to practice medicine, schools of medicine cease to exist. These belong to the metaphysics of the dark ages, when men, in default of science, tried to practice philosophy.

At the most, or at the best, a school indicates merely a preference for one mode of therapeutics over another, or over all others, a matter of very minor importance as compared with knowing the nature of the ailment in question and of the causes which brought it about. Accuracy of scientific knowledge is fatal to the prearranged theory of treatment of disease, the basis of any school of theoretical medicine. Accuracy of knowledge goes beyond symptoms or surface indications. It is with symptoms and symptoms only, in default of knowledge that varying schools of medical therapeutics become possible. When we know the actual conditions which give rise to symptoms, all methods must rest on these conditions.

All art is based on science. Science is human experience tested and set in order. Art is knowledge in action. An art which is not based on knowledge becomes a mystery or a trade. The practice of medicine through the ages has been one or the other or both. It is a trade when the physician apprentice follows his master about, learns his ways, his prescriptions and his professional dignity. It is a mystery, when practice is based on some theory of therapeutics which goes outside of human experience for its justification.

Science is alike to all men who have grasped its data and its conclusions. Art will vary with the personality of the individuals who practice it. Sound medicine must rest on science. Whoever treats the ills of the human body successfully must know this body in health and in disease. He must know the range of its disorders, its abuses, its dislocations and its parasites. Those who try to heal without knowledge of the actual conditions with which they deal are of necessity imposters.

The limit of "medical freedom" is a very plain and natural one. Let the patient take whatever kind of treatment he may wish, but let no treatment be administered by persons who have no knowledge of the fundamental facts of medical science. If the requirement of technical knowledge is fatal to any school of therapeutics, it is time that that particular form of robbery should be done away with. Taking chances with the lives of others for the money there is in it is not a profession to be encouraged.

The basis of the varying schools of medicine lies not in science but in the varying theories of symptoms. In the old days, when micro-organisms were unknown, when physiology was elemental and pharmacology itself a form of metaphysics, it is not strange that symptoms engrossed the attention of the practitioner and that there grew up widely differing theories in regard to their treatment.

It was natural in those days, that men should face symptoms with remedies calculated to remove or obscure them. This method, contemptuously designated as allopathy, "unlike treatment," as the drug and symptom were unlike, had in it the germ of better things, because it gave play for experiment and was not bound hand and foot by any predetermined notion. It was a step forward from the idea of the dark ages, that each disease had some definite predestined remedy, that for each ailment, that is a special group of symptoms, there was somewhere, somehow, some cure mysteriously provided in nature if we could only find it out.

As the plant world lies all about us, as most plants secrete or produce something with a definite odor or taste, balms, resins, aromatic oils, bitter alkaloids, strange substances useless for any purpose unless it be that of medication, it was natural that men should turn their attention to these substances. Some of these products or simples showed strange effectiveness. Others did no harm and were therefore suspected of doing good. Quinine was thought to cure malaria by setting up a feverish condition like that arising from malaria itself. Digitalis controlled the action of the heart. Mandrake, senna, rhubarb, kept the bowels open. The pink was death to worms. Yerba buena, yerba santa, sage tea, catnip tea, tansy tea, sassafras tea, as well as tar, molasses and sulphur were "good for the blood," especially in the spring, and the tonic effect of almost any bitter bark dissolved in alcohol was highly appreciated.

Out of this notion that a specific disease had a specific cure, naturally arose the form of quackery involved in the patent medicine. Its practical value lay in the elimination of the doctor, or rather in postponing his arrival until near the end. It is very simple, by reading an advertisement in an easy-going newspaper, or by the perusal of an almanac, to pick out your own disease from the list of symptoms graphically set forth. Almost everyone has felt headaches, twinges, blurrings, ringings, smartings, aches, givings and misgivings, and these will indicate the necessary drug. If this drug be essentially whisky and water made

sweet or bitter by some easy stain, or if some more virulent or effective poison is used, there is likely to be enough of apparent satisfaction or of change in symptoms to justify a written testimonial and another bottle of the drug. Or if the basal constituent of the medicine be merely water, the effect of hope with the lack of visible harm is likely to lead to the same results. In either case, the self-medication is likely to produce no effect or an effect worse than nothing.

While much that is now sold in the drug stores represents merely a harmless or sometimes useful physician's prescription, the aggregate result of the patent medicine is the building up of gigantic systems of robbery on the one hand and a corresponding damage to public health on the other.

The way out of the patent medicine domination lies in the better training of physicians on the one hand and the enlightenment of public opinion on the other. No more effective agency exists for the forming of public opinion than an aggressive administration of the bureau at Washington which deals with pure food and pure drugs. No single agency in this direction has counted for so much as the personal work of one man, who has spent his life in fighting frauds and poisons. But we must have a hundred Wileys in the public service where now we have not one.

Among the host of specifics, men naturally sought for some guiding rule, some informing spirit that would tell them beforehand and once for all how to match these diseases with the predestined healing agent. Sometimes this was found in the looks of the plant. Its flowers or leaves or roots somehow simulated the disease it was bound to cure. Thus the figwort was denominated *scrophularia*, apparently for its scrofulous appearance. The liver-shaped leaves of hepatica, the liverwort, showed clearly what was expected of it. And in the ignorance of what was really the matter and of what really happened after a remedy was absorbed, there were as many successes as failures, and the dark mysteries of the profession prevented any following up of either.

A more scientific application of the method of resemblances lay in the study of the effects produced by a drug in relation to the symptoms of the malady it was to cure. Like symptoms, like effects. Like cures like. If your patient is troubled with colic, give him a colic-producing drug; if with eczema give him something to make the skin smart. The same principle would hold for all diseases.

But with this went the saving clause of homeopathy, or like treatment—Don't give much and give good nursing. As time, patience and good nursing are the best of drugs, this method has had a large vogue as well as a large effectiveness. If it is based on a sound study of the human body, its defects, its slips and its parasites, this method must merge into the real practice of medicine. For, knowing the distemper, its causes and its range, the method of treatment is a minor matter.

The idea that a disease has a definite drug as its remedy, whether in large quantities or small, is a relic of the middle ages. Drugs do not

heal anything. Some are palliative, resting in the category of vaseline, cold cream or talcum powder, some kill parasites directly as quinine kills the animal organisms known as malaria. Sulphur is death to the itch, the visible cause of the distemper once thought almost incurable, and known as the "gall struck inwards." Others do evil as stimulants or counter irritants, that good may come, helping on the one hand through the incidental damage on the other.

But the metaphysical relation of drug to symptom has no existence and has passed out of medical practice never to return.

With doubts of the efficiency of drugs as remedies came theories of therapeutics by which all drugs were discarded. Orthopathy in its day rejected them all, relying on the well-known disposition of nature to heal her wounds whenever she is let alone. Hydropathy set people to sweating under close envelopes of wet sheets, often, it is true, to their great advantage. I can remember when the Wet Sheet Packing and the Over Soul were the test and signal of a progressive nature, much as today are the Referendum and Recall.

Mind-healing in various forms has always found its place. It is a notorious fact that when the symptoms of any disease are graphically set forth, the average reader finds most of these symptoms in himself. It is only a step to the conclusion that these symptoms are the cause of the disease. If you can create the impression that the symptoms do not exist you take away the disease. For disease and symptoms are alike the product of morbidity of mind. To have faith is to cure this morbidity. "Sin, sorrow and sickness," says one of the leaders of this form of therapeutics, "are all three illusions of the sinful soul. \* \* \* They are but troubled dreams of a darkened soul. \* \* \* In afflictions of disease and dread and death one must say 'This is a dream.' Then it becomes a dream and we rise above it into an atmosphere of perfect serenity. \* \* \* We need not deal with the body, for the body does not exist. It is dull, heavy, aching because it is the dead residuum of dream. When we forget it, it is no longer there. Treat a belief in sickness as you would a sin, with sudden dismissal."

It is undoubtedly true that a serene spirit is a valuable agency in the recovery from disease. It is likewise true that suggestion has a mighty potency when it is rightly applied. It is a legitimate and recognized branch of therapeutics, which may be destined to have a wide application in the future treatment of disorders of the nervous system. But it is likewise true that suggestion heals no broken bones, a spirit unper- turbed gives no safeguard against poisoned mosquitoes, and the power of the will and the imagination is potent chiefly against disorders of the imagination and the will.

The first and most important thing in any treatment is to find out what is the matter and then, if may be, to remove the cause from which the symptoms flow. No system of philosophy, no cult of religion gives us help as to matters of fact. It does not strengthen our knowledge of

the demands of the body to deny the body's existence. The whole fabric of modern science, the whole fabric of modern civilization is based on the conception of the reality of external things. The sanity of life is conditioned on our belief in realities, the mental states produced by contact with external things as distinct from illusions, those mental states arising from conditions within ourselves. This distinction is the foundation of safety in life. Our body through its nervous system is cognizant of realities. The defects in this nervous system may cloud our view with illusions. The art of sound living is to discriminate between the two sets of impressions. To confuse reality and illusion is to confuse life and death. To show that perception and reason may sometimes be deceived is not to add reality to the figments of imagination. It does not advance science to doubt the things we know to be true in order to give proof to propositions we know to be false.

We may be therefore certain that progressive medicine will still believe in the reality of the human body and the rational veracity of the world of sense.

We may be sure that medical science does not grow in accordance with the theories of any school of medicine or of metaphysics. It is advanced by the study of things as they are, by the use of tools of precision on definite problems, by the microscope and scalpel, the test tube and reagent, by the culture of germs and the discovery of germ-killers. It grows by probing the actual causes of bodily disturbances and the actual removal of such causes. It grows, as all sciences have grown, by the method of induction, by putting two and two together and verifying the apparent existence of four as a resultant.

And in the future of medicine, the mere removal of disease must play more and more a subordinate part. Most disease can be prevented. Above all therapeutics stands sanitation. It is possible to remove causes of disease long before any disease begins. It is possible to heal our patients long before they are ever sick. Our knowledge in many fields is now adequate for this result. No one can be attacked by an infectious disease unless we have somehow or other permitted the infection.

In modern war, it now costs on the average about \$15,000 to kill a man. In the late Boer war, this expense ran up to nearly \$40,000. It is cheaper to save men. It is cheaper to stop killing. In our own country, in time of peace, when nothing but peace is possible among civilized nations, we spend nearly a million dollars a day on matters concerned with past or future wars; \$850,000 a day on future wars alone, that we may not be caught napping when the day of the impossible shall arrive.

A wiser or more civilized nation would give some part of this sum to the prevention or stamping out of the worst of the infectious diseases. For if we are napping these are sure to come. The danger of the red plague, present everywhere, is infinitely greater than that of war with any part of Europe or of Asia. The terrible infliction of the unknown parasite which shows itself as infantile paralysis awaits the strong arm of the

people to set it aside entirely. No disease would long exist if we made adequate quarantine provision. Its germs, animal or plant, must be carried from man to man or from animal to man, else the race of parasites would die out. Now that we know what our enemies are it is possible for us to fight them. This I said in a review of Tyndall's work which I printed thirty-five years ago. Now that we know what our enemies are, and now that we know that they can be fought successfully only by national and international co-operation, it is our duty thus to fight them. It shows a lack of national manliness to continue to bear these ills when a little energy with the knowledge we have is adequate to throw them all off.

I am still a young man, I am sure of that. As I said once before, when I hear the students speak of Old Jordan, I know that they mean the river of Palestine, or perchance in these days a forbidden brand of alcoholics. They do not mean me. It is not so many years since I received the degree of Doctor of Medicine,—and I hasten to say that I have never practiced medicine and never intended to, so that my failures in knowledge have never harmed any one, nor brought me a dollar of unearned increment.

But at that time, in 1875, the words "bacterium," "bacillus," "microbe," were all unknown, all slumbering together in the Greek lexicon. This lexicon gave no suspicion that *bacterion* and *logos* would come together to form a science, and that the one science most vitally related to human life. The world of science and therefore the province of medicine knew nothing of invisible one-celled animals and plants, bacteria and protozoa, which flourish and run their courses in the life blood of living animals.

The source of infection in disease was then called a "virus" and the growth of a virus was an extension of death. Carlyle had said that a fallen leaf must still have life in it else how could it rot. But neither the poet nor the prophet realized that this life which tore the fallen leaf to pieces was the life of a multifarious group of one-celled vegetation whose function it is to return all organic matter not still active back to the universe in its constituent elements. In those days malaria was an evil spirit or miasma, the product of bad air or maybe of bad water. All plagues were of the same sort. No one suspected the mosquito, the fly, the flea, the louse, the bed bug or the wood tick of harboring any vices worse than those which their bite or their presence suggests. There was no science of infectious diseases and therefore no art in curing or preventing them. The most that could be done was to let them run their course, allaying as might be some of their most annoying symptoms.

Antiseptics were only guess work. We had not heard of carbolic acid, or barely heard of it, and the coal tar products with their varied possibilities of usefulness and mischief still lay in the fossil beds of the earth. Surgery was a matter of luck, a gamble, as the phrase is, still conducted as has been said, "along the lines laid down by the early Egyp-

tians." There had been no Lister to show the reason for clean knives, clean hands and clean air, and the battlefields of those days were a wild riot of the germs of gangrene and blood poisoning.

As surgery did not exist, we knew nothing of preventive surgery or the surgery of pathology.

As medicine dealt with symptoms, we knew nothing of pharmacology. These were the days before Michael Foster, and physiology was still merely a series of deductions from the facts of elementary anatomy. The nature and structure of the body cell was very scantily known. Without knowing the germ cell, the physical basis of heredity, the science of heredity was unknown, and without accurate knowledge of heredity, the science of eugenics can have no existence or meaning.

In these times, the facts and laws of pathology are to the trained physician as essential as the alphabet or the multiplication table to the rest of the world. But we poor practical doctors of our day had to get along without it. Science had not reached so far, and we had to be practical men because perforce we could not be scientific. Dr. Charles Sedgwick Minot has well pointed out the distinction. "The only important difference," he says, "between the practical doctor and the scientific doctor is that the patients of the practical doctor are more likely to die." In healing men, as in other lines of industry, the first requisite is to know how. To know how is the essence of science.

The next stage of the scientific doctor is not merely to cure his patients but to help conduct the affairs of the community so that men and women will no longer come to him to be cured. Half the disease of the world comes from the infection of the crowd. Nine-tenths of the infection of the crowd could be spared if the knowledge we have could work itself out in governmental action.

The governments of the world are about the poorest tools we know for the achievement of good deeds. They are controlled by tradition, by prejudice, by the noise of fife and drum. They are ruled by the influence of caste and privilege. They are bigoted and wasteful and when they deal with the individual life they are likely to be careless and unjust.

But in dealing with the great plagues of the world, the black, the yellow, the red and all the poisonous array of health-breaking parasites, the government is the only tool we have. The individual is helpless, the community is all. The acts of the community cannot rise much above its knowledge. All effective government is by public opinion. The people must learn the facts of pathology and of sanitation. There is no school of medicine which can honorably come between them and the truth.

And that the Lane Library of Stanford University, the Medical Department of Stanford University, and the University itself, may do their part in the great work of bringing health to the people, that they may co-operate with the sister schools and with all other good agencies to good ends, is the motive behind the functions of today.

## THE WORDS OF DEDICATION

The Reverend Bradford Leavitt, minister of the First Unitarian Church of San Francisco, read the following passage from Ecclesiasticus:

Honor a physician with the honours due unto him: for verily the Lord hath created him. For from the Most High cometh healing; and from the king he shall receive a gift. The skill of the physician shall lift up his head; and in the sight of great men he shall be admired. The Lord created medicines out of the earth; and a prudent man will not despise them. With them doth he heal a man, and taketh away his pain. There is a time when in their very hands is the issue of life. For they also shall beseech the Lord, that he may prosper them in giving relief and in healing for the maintenance of life. And from him is peace upon the face of the earth.

At the close of the exercises while the audience was standing for the benediction, he pronounced the words of dedication as follows:

"Almighty God, standing as in thy presence, solemnly, we dedicate this building to medical practice and medical research, to the service of humanity, which is the service of God."

## APPENDIX

The following account of the Lane Library Building is contributed by Professor Ray Lyman Wilbur, Executive Head of the Department of Medicine.

The new Lane Medical Library Building, in which the volumes of the University's Department of Medicine are now shelved and at the service of the students of the Department and of the medical profession, is not only thoroughly modern and convenient, but beautiful as well. Constructed on a steel frame, the exterior is of smooth Colusa sandstone of a soft grey color, while the interior gives an impression of spacious substantiality and quiet.

The general reading room, with its open shelves of reference volumes, its broad reading tables and its quiet green walls, is particularly fortunate. To this room is added beauty and dignity, also by the mural paintings from the brush of Arthur F. Mathews, of San Francisco. These pictures are the gift of Mrs. Henrietta Zeile. They occupy three large panels on the east side of the Reading Room, adding a fine touch of color to the somewhat somber green wall. One shows beneath a spreading oak an Indian medicine man—the primitive art of healing. Another is a mediaeval towered city with a red robed doctor reassuring a group of frightened people who cower before a woman with the "evil eye." In the central panel Urania, in starry blue kneels, with her hand upon a sphere, Therspichore with dancing girls embroidered on her cloak, ivy-crowned Thalia, dark draped Melpomene and their sister muses surround a white clad woman, Hygeia, and a child. The work is

in Mathew's best style, the flesh tones of the life size figures wonderful, the landscapes beautiful with purple shadows, rolling hills and sunlit clouds.

The reading rooms for the special libraries, such as that on ophthalmology and otology, the gift of Professor Adolph Barkan, are also excellent, the lighting arrangements for night work, through reflected and diffused lights, being particularly good.

The stack rooms are absolutely fire-proof, and can be cut off by metal doors from the rest of the building. There is no wood at all in the construction of this part of the building, the floors and walls being of concrete, the doors and stacks of metal.

The forty thousand volumes which at present constitute the library and make it the largest of any of the university medical libraries in America, are easily accommodated on the shelves, which can hold half as many more, without further addition. There is, moreover, available space in the building as it now stands which can be filled with stacks to bring the capacity up to something like three times the number of volumes the University now owns. After that, the building can be extended out over the lot next to the Library on Sacramento street, which the University owns, and space provided for indefinite expansion.

The architect of the Library is Mr. Albert Pissis, who through this building has added to the high reputation he already held as the designer of many of the finest structures in San Francisco.

The dedication of the Lane Medical Library Building marks the completion of the first stage in the development of the Stanford University Medical Department. The Trustees of the University, acting as trustees of the funds left by Dr. and Mrs. Lane, have constructed a building that will be of great service to the medical profession of the West and of particular service to the Medical Department. In fact its possession is a great asset in the development of proper medical teaching and makes the new Medical Department unique in this country.

The high standard that Stanford set in medical education, requiring three years of University work for admission into medicine, placed the Medical Department at once in the front rank of such institutions. The requirements are equal to those of Cornell and Western Reserve University and not unlike those of Harvard, Columbia and Pennsylvania. Johns Hopkins requires an A. B. degree for admission; Harvard admits upon an A. B. degree but permits students who have covered certain special subjects to enter after two years of University work. It has been a source of gratification that, in spite of these high requirements, forty-six students have registered in Medicine even before a single class has been graduated. The class of five, sent up to San Francisco in January, 1910, has now increased to ten, two students having joined it from the University of California last year, and one each from Johns Hopkins, the University of Chicago and Cooper Medical College this year. It is anticipated that

there will be a slow but steady growth in the number of students but that the number admitted will always be small.

The space made available in the Clinical and Laboratory Building by the removal of the Library, together with a portion of the former auditorium, is being remodeled and within a month the Medical Department will have the best equipped outpatient clinics west of Chicago. July 1, 1912, the control of Lane Hospital passed into the hands of the Clinical Committee of the Medical Faculty so that the University Hospital is under the direct supervision of the instructing staff, a most important advantage in proper medical teaching and one possessed by but few American medical schools. Arrangements have been made by the Board of Trustees to facilitate the business management of the Hospital and Medical Department in San Francisco and to improve the service for the private rooms. The home formerly occupied by Dr. and Mrs. Lane, which is in the block opposite the hospital, is now being used as a temporary nurses' home.

As at present organized, with the Lane Medical Library, Lane Hospital, the outpatient clinics and the laboratories in San Francisco, the excellent services at the San Francisco Hospital, and with the laboratories of Chemistry, Physiology, Anatomy, Bacteriology, Pharmacology, Physics, Zoology and Botany on the campus, there is no better Medical Department for a limited number of students in this country.

Like all growing things, the Medical Department has many pressing needs. Among them are the construction of a new nurses' home, for which the land is available, the construction of a maternity home and women's clinic, for which land is likewise available, and the construction of a new children's hospital. The further endowment of Lane Hospital and the endowment of certain professorships is very much needed in order that the institution may grow in the best way. A number of alumni and others have contributed books and money to the Library and money to the Hospital, both for the upkeep of beds and for special expenses. Recently Mr. Felton B. Elkins has presented the Department with funds for the salary for the chief obstetrical nurse for the present year.

In general, it can be said that for the short time that Stanford has been engaged in medical education, she has made a good record. Future development has been planned for in such a way that advantage can be taken of any help, great or small, that comes to the Medical Department.

The advent of Stanford into San Francisco is of much significance. The number of people concerned is alone worthy of mention. Besides the Faculty and students, there is a metropolitan hospital with an average of 150 patients, changing from day to day, a Training School of 80 nurses, other employees of like number and from 50,000 to 60,000 visits per year in the out-patient clinical departments.

